

# Forest Research Notes

## **N**ortheastern Forest

FOREST SERVICE, U.S. DEPT. OF AGRICULTURE, 102 MOTORS AVENUE, UPPER DARBY, PA.

## **E**xperiment Station

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### REPORT ON 1960 FOREST TREE SEED CROP IN NEW ENGLAND

The 1960 forest tree seed crop in New England was generally a medium one, according to reports received from observers in five of the six states.<sup>1</sup> The crop was fairly uniform throughout the region; there were only few reports of marked differences between different sections. On the whole, the crop was somewhat better than that in 1959, and very much better for some northern hardwood species.

Species producing the best seed crops, region-wide, were red and sugar maples, white ash, beech, and elm; these crops generally were reported as heavy or medium to heavy. However, several observers noted that many of the sugar maple fruits were empty. Other hardwoods, except black cherry, bore medium crops in most sections; the black cherry crop was very light and spotty.

Conifer species in general had poorer crops than the hardwoods. Reports for the conifers ranged mostly from light to medium. No heavy pine seed crops were reported this year from any locality, and there were some reports of failures (table 1). A potentially heavy crop of white pine seed in the Champlain Valley in Vermont was said to have been destroyed by cone insects.

Seed crops of all species tended to be somewhat better in the northern parts of Maine, New Hampshire, and Ver-

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<sup>1</sup>Based on 46 reports distributed as follows: Maine 12, New Hampshire 7, Vermont 20, Rhode Island 2, Connecticut 5. State Service Foresters, Industrial foresters, and U. S. Forest Service personnel cooperated in supplying this information. The project was conducted by the Committee on Silviculture, New England Section, Society of American Foresters.



mont than in other sections. Balsam fir, characterized by a light crop over most of New England, bore a heavy crop in the northern Green Mountains. Crops were comparatively poor in eastern Connecticut and Rhode Island.

Table 1.--Forest tree seed crops in New England, 1960

Species	Seed crop classification* and distribution	Remarks
White pine	Very light, spotty	Several reported failure
Red pine	Light, spotty	Several reported failure
White spruce	Medium, spotty	--
Red spruce	Light, spotty	Occasionally medium
Balsam fir	Light, general	Heavy in northern Vermont
Hemlock	Medium, general	Light in northern New Hampshire
Tamarack	Light, general	--
Red cedar	Light, general	--
White cedar	Medium, general	Heavy in northern New England
Red maple	Heavy, general	--
Sugar maple	Heavy, general	Several reported empty seed coats
Black birch	Medium, general	--
Yellow birch	Medium, general	Better in northern New England
White birch	Medium, general	--
Red oak	Medium, general	Poor in southern New England
White oak	Medium, general	Poor in southern New England
Basswood	Medium, spotty	Ranges from very light to medium
Beech	Medium, general	Heavy in some areas
White ash	Heavy, general	--
Black cherry	Very light, spotty	--
Butternut	Medium, spotty	Ranges from very light to medium
Elm	Heavy, general	Medium in Connecticut
Trembling aspen	Medium, general	--
Bigtooth aspen	Medium, general	--

\*Seed crops are classified as follows:

- F = Failure: none, or few seeds on occasional trees.  
VL = Very light: few seeds on 25 percent of the trees.  
L = Light: few seeds on 75 percent of the trees.  
M = Medium: some seeds on all trees, many on some trees (up to 75 percent).  
H = Heavy: some seeds on all trees, many on most trees (over 75 percent).



Table 2.--Seed crops compared for two years

(Selected species in Vermont)

Species	Seed crop classification*	
	1959	1960
Balsam fir	VL	L
White pine	L	VL
Red pine	VL	VL
Hemlock	L	M
Red maple	VL	M
Sugar maple	VL	H
Beech	VL	M
White ash	L	H

\* See table 1.

To illustrate the region-wide trends in size of seed crop from 1959 to 1960, reports for the 2 years for selected species in Vermont were compared. These reports (table 2) are especially indicative because they were made both years by the same men. The general trends are: for conifers--little change, mostly light crops both years; for hardwoods--markedly better crops in 1960.

--THOMAS W. McCONKEY  
 Research Forester  
 Massabesic Experimental Forest  
 Northeastern Forest Experiment Station  
 Forest Service, U.S. Dept. Agriculture  
 Alfred, Maine